

REMARKS

Reconsideration of the above-identified patent application in view of the Amendment filed on December 3, 2003 and the present Supplemental Amendment is respectfully requested.

Although referenced in the Amendment filed on December 3, 2003, it appears that the Proposed Drawing Amendment was inadvertently omitted from the Amendment. Therefore, a Proposed Drawing Amendment that amends Fig. 1 in accordance with the Examiner's suggestion is being filed contemporaneously herewith.

This Supplemental Amendment supplements the Amendment filed on December 3, 2003, which amended claim 16 and added new claims 17-31. This Supplemental Amendment adds new claims 32-37.

New claim 32 recites a vehicle occupant safety system for helping to protect an occupant of a vehicle seat during a crash condition. The system comprises at least one sensor for sensing a vehicle crash condition and generating a signal indicative of the crash condition. The system also comprises seat belt webbing for extending around the vehicle occupant. A pretensioner is responsive to the signal generated by the sensor for acting on the seat belt webbing. The pretensioner comprises a seat belt retractor that includes a spool on which the seat belt webbing is wound and an electric motor for rotating the spool in a belt retraction direction. The system also includes a gear assembly for drivingly connecting the electric motor to the spool. The gear assembly includes a

gear that is driven by the electric motor and a plurality of gear teeth that are formed on a surface of the spool. The gear engages the gear teeth of the spool and movement of the gear causes rotation of the spool.

New claim 32 patentably defines over Frantom et al., U.S. Patent No. 4,655,312, Maekawa et al., U.S. Patent No. 5,765,774, and Behr, U.S. Patent No. 5,558,370, whether taken singularly or in combination. Frantom et al., Maekawa et al., and Behr all fail to teach or suggest a gear assembly for drivingly connecting an electric motor and a spool in which the gear assembly includes a gear that is driven by the electric motor and a plurality of gear teeth that are formed on a surface of the spool. In Frantom et al., a gear 284 is attached to the output shaft of the electric motor 42 and another gear 286 is attached to an axle of the take-up spool 282. (Frantom et al., Fig. 10). Thus, in Frantom et al., no gear teeth are formed on a surface of the take-up spool 282. In Maekawa et al., the shaft 1 of the motor 10 is integrated with the belt reel 2 and is not connected by a gear assembly. (Maekawa et al., Col. 3, lines 1-2). Behr also fails to teach or suggest this feature of claim 32. Therefore, allowance of claim 32 is respectfully requested.

New claims 33-37 depend from claim 32 and are allowable for at least the same reasons as claim 32. Additionally, claims 33-37 are allowable for the specific limitations of each claim.

Specifically, claim 33 recites that the spool includes an axle and two support walls. The seat belt webbing is wound

onto the spool in a location between the support walls. The plurality of gear teeth is formed on a surface of one of the support walls of the spool. None of Frantom et al., Maekawa et al., and Behr teaches or suggests these features of claim 33. Therefore, allowance of claim 33 is respectfully requested.

Claim 34 recites that the support wall having the plurality of gear teeth has opposite first and second side surfaces. The seat belt webbing, when wound onto the spool, is located adjacent the first side surface of the support wall and the plurality of gear teeth is located on the second side surface of the support wall. None of Frantom et al., Maekawa et al., and Behr teaches or suggests these features of claim 34. Therefore, allowance of claim 34 is respectfully requested.

Claim 35 recites that the plurality of gear teeth form a circular array around the periphery of the second side surface of the support wall. None of Frantom et al., Maekawa et al., and Behr teaches or suggests this feature of claim 35. Therefore, allowance of claim 35 is respectfully requested.

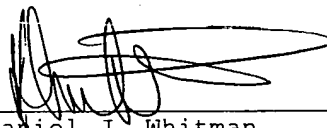
Claim 36 recites that the spool is a one-piece structure and is not formed from separate structures secured together. The plurality of gear teeth forms a portion of the one-piece structure of the spool. Fig. 2 of the present application supports this language of claim 36. None of Frantom et al., Maekawa et al., and Behr teaches or suggests these features of claim 36. Therefore, allowance of claim 36 is respectfully requested.

Claim 37 recites that the electric motor is coaxial with the spool. Fig. 2 of the present application also supports the language of claim 37. None of Frantom et al., Maekawa et al., and Behr teaches or suggests an electric motor that is drivingly connected to a spool through a gear assembly and is coaxial with the spool. Therefore, allowance of claim 37 is respectfully requested.

In view of the foregoing and the remarks set forth in the Amendment dated December 3, 2003 of which this Amendment is a supplement, it is respectfully submitted that the above-identified patent application is in condition for allowance, and allowance of the above-identified patent application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,



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